



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,922	08/20/2003	Oswald Kuwert	105273.01	4768
25944	7590	01/08/2004	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			LAM, THANH	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 01/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/643,922	Applicant(s) KUWERT ET AL.	
	Examiner Thanh Lam	Art Unit 2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/487,803.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akahori (pn. 6,455,965) in view of Suzuki et al. (pn 5,866,961).

Akahori (fig 1) disclose a spindle motor for a disk driving device, comprising: a housing having annular hole and a cylindrical projection portion formed integrally with the housing; a stator comprising a stack and coils wound around the stack, the stator is mounted on an outer circumference of the cylindrical projection portion of the housing to confront a magnet; a lead wire of the coils is connected to an electric supplying connector portion; and a rotor having a central hole and a downwardly depending flange at an outer periphery thereof, the magnet (4) is disposed on an inner peripheral surface of the downwardly depending flange of the rotor, the

Art Unit: 2834

rotor supported rotatably relative to the housing by a bearing means, the bearing means is a double row ball bearing and comprising a sleeve outer ring (9), a plurality of first balls (15), a plurality of second balls, an inner ring and a shaft, the sleeve outer ring having a pair of outer raceway grooves on an inner circumference surface of the sleeve outer ring, the shaft having a small diameter portion and a large diameter portion with an inner raceway groove on the outer circumference surface of the large diameter portion, the inner ring is fixed on the small diameter portion of the shaft, the first balls are disposed between one outer raceway groove of the sleeve outer ring and an inner raceway groove formed on an outer circumference surface of the inner ring, the second balls are disposed between another outer raceway groove of the sleeve outer ring and the inner raceway groove of the large diameter portion of the shaft, wherein the large diameter portion of the shaft is fitted in the annular hole of the housing, the sleeve outer ring is fitted in the central hole of the rotor, one end portion of the sleeve outer ring being located in the cylindrical projection portion.

Suzuki et al. disclose the housing and rotor are made of a super engineering plastic material (LCP col. 3, lines 32-36) and are unitarily formed by injection molding.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the housing material of Akahori by using the housing material as taught by Suzuki et al. in order to increase durability of the motor housing.

Regarding claim 2, the proposal in combination of Akahori and Suzuki et al. disclose super engineering plastic material is selected from liquid crystal polymer.

Regarding claim 3, the proposal in combination of Akahori and Suzuki et al. disclose the lead wire (7) is connected to the electric supplying connector portion through a through-hole

Art Unit: 2834

formed in the housing.

Regarding claim 4, the proposal in combination of Akahori and Suzuki et al. disclose the electric supplying connector portion is molded with the housing in a unitary manner.

Regarding claim 5, the proposal in combination of Akahori and Suzuki et al. disclose the lead wire is connected to a flexible printed circuit board.

Regarding claim 6, the proposal in combination of Akahori and Suzuki et al. disclose the magnet is a rubber magnet.


Regarding claim 7, the proposal in combination of Akahori and Suzuki et al. disclose the spindle motor is for a hard disk drive.

Regarding claim 8, the proposal in combination of Akahori and Suzuki et al. disclose the housing having the annular hole and the cylindrical projection portion is formed therewith as a one-piece member.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Lam whose telephone number is (703) 308-7626. The examiner can normally be reached on m-f 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0656.


Thanh Lam
Primary Examiner
Art Unit 2834